



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,876	02/06/2001	Oris L. Nelson	N 120011	8412

27321 7590 04/01/2002

ALVIN S. BLUM
2350 DELMAR PLACE
FORT LAUDERDALE, FL 33301

EXAMINER

PRUCHNIC, STANLEY J

ART UNIT	PAPER NUMBER
----------	--------------

2859

DATE MAILED: 04/01/2002

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/776,876

Applicant(s)

NELSON, ORIS L.

Examiner

Stanley J. Pruchnic, Jr.

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 and 8 is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. This application has been filed with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.
2. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.
3. Since allowable subject matter has been indicated, applicant is encouraged to submit formal drawings in response to this Office Action. The early submission of formal drawings will permit the Office to review the drawings for acceptability and to resolve any informalities remaining therein before the application is passed to issue. This will avoid possible delays in the issue process.
4. The drawings are objected to because
 - a. Appropriate labels, e.g., external contact, thermal conductivity measurement assembly, on/off switch, battery, control circuit, current meter, etc. have not been provided for the elements 4, 7, 14, 15, 16, 17 shown in Fig. 1 with non-conventional symbols; and
 - b. Appropriate reference characters have not been provided for the elements shown in Fig. 2. It would be appreciated if these method steps could be labeled

Art Unit: 2859

and then the specification modified appropriately to refer more directly to each of the steps by inserting the same reference characters.

- c. Please check the spelling of the text in the blocks of Fig. 2, *e.g.*, "DIPLAY" in the seventh box should be --DISPLAY--.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities:
 - a. On Page 3, in Line 18, the word "both" before "positive" appears to be redundant. It is noted that this is in the paragraph beginning on line 13.Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,265,884 (Menashi, *et al.*, hereinafter MENASHI) in view of AUSTIN (U.S. Pat. No. 6,043,742).

MENASHI discloses or suggests an apparatus for testing a stone mounted in an electrically conductive mounting for genuineness as a diamond with a single probe applied to the stone surface, the apparatus comprising:

a) a thermally and electrically conductive probe tip ("two electrode device"; Col. 2, Line 1) mounted in a housing;

b) a thermal conductivity measuring assembly (Col. 1, Line 66 through Col. 2, Line 12) mounted in the housing and connected to the probe tip;

c) an electrical conductivity measuring assembly (Col. 2, Lines 4-10) mounted in the housing and connected to the probe tip;

d) thermal conductivity display mounted in the housing and connected to the thermal conductivity measuring assembly for displaying an indication of the thermal conductivity of the stone relative to the thermal conductivity of diamond; and

e) electrical conductivity display means mounted in the housing and connected to the electrical conductivity measuring assembly for displaying an indication of the electrical conductivity of the stone relative to the electrical conductivity of diamond.

The display means are required to "positively indicate" as taught by MENASHI in Col. 2, Lines 8-10) and it is considered that they could be a single indicator providing an indication of the results of both measurements of thermal conductivity and electrical conductivity or a means for indicating the results of each of the tests individually.

MENASHI does not disclose a housing as claimed by Applicant.

Art Unit: 2859

AUSTIN discloses an apparatus 10 for testing a gemstone that includes a housing 12 in order that the device may be hand-held (Col. 2, Line 34 through Col. 3, Line 11).

Therefore one of ordinary skill in the art at the time the invention was made would have found it obvious to add a housing to the apparatus for testing a stone disclosed by MENASHI, in order to mount all of the components, enabling the device to be hand-held, as taught by AUSTIN.

Allowable Subject Matter

8. Claims 7 and 8 are allowed.
9. Claims 2-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
10. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).
11. The following is a statement of reasons for the indication of allowable subject matter: Neither MENASHI nor AUSTIN (nor any of the other art of record) suggest requiring testing of the stone sequentially using both thermal conductivity and electrical conductivity comparisons to the diamond values. Claims 2, 7 and 8 are allowable because the prior art fails to teach or fairly suggest an apparatus or method for testing a stone mounted in an electrically conductive mounting for genuineness as a diamond with a single probe applied to the stone surface, comprising: a housing and both a

Art Unit: 2859

thermal conductivity measuring assembly and an electrical conductivity measuring assembly, each mounted in the housing and connected to the probe tip including circuitry means in the housing connected to the two assemblies for sequentially actuating first one of the assemblies and then the other of the assemblies as defined in the claims, each arranged and functioning as recited in claims 2, 7 and 8. Claims 3-6 are allowable by virtue of their dependency upon claim 2.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in PTO-892 and not mentioned above disclose related apparatus for distinguishing gemstones using electrical and thermal conductivity methods.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stanley J. Pruchnic, Jr. whose telephone number is (703) 306-5474. The examiner can normally be reached on 7:15 AM to 3:45 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. F. Gutierrez can be reached on (703) 308-3875. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.



**DIEGO F. F. GUTIERREZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800**



Stanley J. Pruchnic, Jr.
March 23, 2002